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## ORIGIN AND HISTORY OF COINED MONEY.

IN questioning history as to the origin of coined money, we find no definite or satisfactory answer. Any writer on the subject can, and I believe every one does tell us, that it grew out of exchange and barter. So much is self-evident. Gold and silver, being used as an universal equivalent, were exchanged by weight for other commodities; and finally ingots received the form of coins. The first reason, however, for applying a figure to an ingot was that of sealing them, and giving them the same authority that a seal gave to a writing. The peculiar mark of the city, or king, certified to the weight and purity of the metal. This is still the object in the tikals of E. I., where nothing but the seal of the mint is stamped upon the bullet-shaped ingot of silver. This, rather than convenience, is the idea of the coin, and was what made it a permanent institution after its first discovery. But I was not intending to investigate the theoretical origin of the subject, but to confine myself to what is known of its first appearance in various lands.

The general division which I shall pursue is into four classes, which have distinct characteristics and marked differences, though running into each other in point of time and geographical location. These classes are, Chinese, Ancient, Mediæval, and Modern. First, a few words as to Chinese numismatics. With a chronology sufficient for a small eternity, with a government unlike anything in the known world, with a social system so averse to the ideas of all other nations, with a conservatism that out-Herods Herod, and a language that violates half the rules of universal grammar, and gives ten thousand elementary characters in common use, — we might expect a peculiar system of coinage. It dates back to the Emperor Yaou, 2536 B. C., just a few years before the Deluge. Kang-he, who reigned in 1650, made a complete series, from Yaou, to his own time, of the Chinese coins. Those of Yaou I have no access to, but bring in one of a later date, B. C. 245, which is identical in shape with the earliest kind. The form changed gradually, passing through the form in the pasteboard copy, leaving off the razor part, and about A. D. 100 taking the well-known form of *cash*, which they retain to this day, with slight variations as to size and weight.

I have merely alluded to China, because it is by itself, an isolated system of coinage, having no resemblances to other nations except Japan, whose peculiar coins are well known but little understood. I pass on now to the second class, Ancient Coins.

This class admits of a quadruple division. I. Greek; including those struck in Greece and her colonies and in other lands with Grecian inscriptions. II. Roman, including all coins with Latin inscriptions, and some few others, from the time of the kings to Justinian, who commences the III. class, Byzantine Coins. IV. Oriental or Mohammedan Coins, to be known by the Arabic or other Oriental language in which the inscriptions are written.

Of these in order. The Greek are undoubtedly the oldest coins now extant. Gold seems to have been first thought worthy of being coined. Herodotus claims for the Lydians, a people of Asia Minor, of the same race as the Greeks, the honor of introducing the invention, and there are still extant coins of a very rude type, from that place. This seems to have happened about 800 B. C., and to have gradually spread through the world. About twenty years after, the inhabitants of Ægina commenced the coining of silver. This is a little island off the west coast of Asia Minor, having the appropriate symbol of the tortoise for its crest, as we might call it now. This appears on



Fig. 1.

obverse, in this case an ear

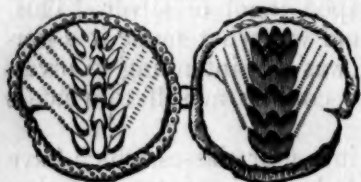


Fig. 2.

the tetradrachm, which I exhibit. On the reverse there is the mark of the punch which was used to force the planchet into the die. This is the type of all the oldest coins extant, but it speedily changed; and the next piece I show, from Metapontum, a city of Italy, shows the next change. The punch made an indented fac-simile of the

use of inscriptions had at this time, 600 B. C., become quite common, and they increase in length and verbosity for some time. Improvements of various kinds, and among them the raised reverse, were gradually introduced into coins between 500 and 400 B. C. The golden age of Greece in this respect dates from 420-200 B. C., when the most perfect gems were issued; and from that time the merit gradually disappears, until they yield to the new styles that were taking their place, and disappear about 300 A. D. The country occupied by them was of great extent. Its fountain-head was in Greece and Italy, where the coins of Alexander of Macedon, and Syracuse in Sicily, yield the palm to none of their contemporaries, though many of them are of high merit. From Gaul, and perhaps Britain, on the north, Spain on the west, to Persia on the east, and Egypt on the south, these pieces held undisputed sway. Wherever commerce went, it carried the stater and daric, and often the silver and even copper pieces. Eckhel, who is the great authority on this class, has given an arrangement of them in four large quarto volumes. I shall not attempt even to glance over his divisions, but, following them, shall note one or two points of interest. His plan, I may notice, is geographical, Europe, Asia, and Africa forming the grand divisions. The coins of Britain are hardly fairly to be classed here, and are of no particular value. Italy furnishes some of the very finest specimens of ancient coins; and perhaps the tetradrachm

of Syracuse is as fine a coin as can be found. I have nothing to show but the piece of Metapontum.

Macedonia early commenced the coinage of money. From 500 till the time of Philip there was a gradual improvement, and then a multitude of staters and tetradrachms were issued by him and his son Alexander. The latter, report says, would allow none but the best artists to execute his portrait. It was placed upon his coins clothed with the lion-skin of Hercules, which has led some to suppose it to be the head of that hero. Upon the reverse is the figure of Jupiter. The copy I present is not nearly as fine as many, the finish of which is truly remarkable.



Fig. 3.

We might come to Athens, the city of art, with the hope of finding more beautiful coins than elsewhere, but in vain. They have a certain elegance of finish, but the head of Minerva is a slander on the goddess, and the owl looks as if carved from wood. Art was too noble to stoop to such base employment

in Athens. Corinth, however, presents a few fine coins. The head of Pallas, and the Pegasus on the reverse, are both well executed.

Of Asiatic coins, I bring in one from Cappadocia, and one from Side in Pamphylia, which will serve to illustrate the general style of copper coinage. One of Seleucis, and another of Aradus, an island near Phœnicia, will illustrate still further types of these coins.

A word as to Jewish Coins. We have no certain account in the Bible of the use of coined money before the Captivity. Joash, indeed, once caused a hole to be bored in the lid of a chest for the reception of contributions; but doubtless coin were not among them, this being eight hundred years before Christ. Simon Maccabæus, about 200 B. C., commenced a series which his successors, and among them Herod the Great, perpetuated. The copper piece is one of this series, while the silver, dating about the time of Christ, is the "shekel of the sanctuary," and probably one of those "pieces of silver" for thirty of which Judas turned traitor. Upon one side is Aaron's rod; the other bears a censer, or a pot of manna.

Persia from the far east sends her contribution to swell the catalogue of Greek coins. Egypt is the most celebrated of the African provinces. Ptolemy Soter founded a series of coins, as well as a line of kings, though both deteriorated sadly. They are all very similar in design, and a silver coin that I bring illustrates the whole.

Carthage deserves a moment's notice. In the horse's head is preserved an old legend of the city. When Dido landed with her followers, and dug the foundation of the city, the head of a horse was discovered, and esteemed a happy omen, — and here the story is perpetuated by this bit of silver more than two thousand years thereafter. Such associations cluster thick around these pieces, had they but voices to tell us of them.

This closes the subject, as far as I can speak of particulars. One or two general items may not be amiss. There are two great classes of Greek coins: Autonomous, or those issued by free cities; and Regal, or those issued by kings. There are about sixteen hundred cities that are included in the limits above mentioned, and perhaps five hundred kings who have issued coins. This gives

about two thousand specimens necessary to form a collection of one from each city and prince; and if all the varieties of metal, size, and device are taken into account, perhaps fifty thousand pieces would not more than complete a perfect collection of the coins of ancient Greece.

The Roman series next claims our attention. The first coins, instead of being gold as in Greece, were of copper, or rather bronze, and were massive ingots with the seal of state upon them. They were first struck about 400 B. C., and about 385 obtained the circular form. Copper was the sole currency till 250, when silver was introduced, and fifty years later followed by gold. Thus it will be noticed that the highest perfection of Grecian coinage witnessed the rise of the system that was destined in a great measure to supersede it. Doubtless the Greek coins during this time circulated freely in Rome and its dependencies, but they do not seem to have excited the ambition of the Roman mint-masters, or even to have furnished models for coinage. The *as*, a huge piece of copper some three inches in diameter, was the unit of value, and with its multiples and divisions, furnished the copper currency; the *as* was equivalent to twelve ounces and was divided into twelve pieces. I bring in a quadrans or four ounces bearing a head of Janus on one side and the prow of a ship on the other. With such pieces as these, 2,000 years ago the Roman children "pitched pennies," crying, "*Capita aut navim*," "heads or ship," as they tossed them into the air. The early silver coins mostly take the form of consular denarii, or coins struck by persons who took the charge of the various mints and placed their names upon the coins. As illustrations of this class, I



Fig. 4.



Fig. 5.

much of.

offer one from the Pompeian gens, representing Romulus and Remus nursed by the wolf; and another of the Julian gens representing Æneas, the founder of the family, carrying his father and household gods from Troy. These coins lasted until the Empire, together with a large issue of gold coins, which it is not my purpose to speak

Just about the Christian era, Augustus Cæsar commenced the imperial series, of gold, silver, and copper, which lasted nearly 500 years, including about 300 emperors with their wives and children.

Colonial coins were also struck by many; and we have coins issued in nearly the same lands as those of the Greek class, with the exception of the remote East. I pass around several of the earlier pieces of this series. They are very similar in design, and too well known to need further remark. As to their number, I may say that perhaps 1,000 would serve to give a specimen of each family, prince, and town that struck coins; while fifty times that, would fail to give a complete series, even avoiding the minor variations.

The Eastern Empire which survived the ruin of the Roman dominion furnishes us with our third class, — Byzantine coins. Commencing with Anastasius, about 500, and extending to the fall of the Empire and its subjugation by Mohammed II. in 1453, it furnishes a class of coins distinguished by many peculiarities.

About eighty sovereigns reigned over the land in this period, and the number of distinct varieties of coin may be estimated at perhaps 5,000.

The gold coins are the most noted of the series, and, under the name of bezants, — from Byzantium, the Greek name of Constantinople, — formed a

great part of the currency of the Middle Ages. The copper pieces are ungainly and of little interest, but I bring in a couple. One of Anastasius, the first in the series of Byzantine emperors, which bears his portrait in front face, instead of profile as usual, and on the other side the letter M, the monetary sign, denoting 40, the piece being of the value of forty *noumia*, a small copper piece of the later Roman emperors. The second piece is one of John Zimisces, A. D. 970, bearing a picture of Christ on the obverse, and the Greek words, *Iesu Christos, Basileus Basileon* [King of kings], on the reverse.

The successors of Mohammed really commenced the series of Oriental coins. At Bagdad and Damascus they struck such coins as the one herewith exhibited, from 632 to 1242 A. D. At present I cannot go into particulars about them, and had I the time I must confess to ignorance. The range of these pieces is from Persia and Hindostan on the east, to Spain, by way of Egypt and Morocco, on the west. They include a period of over 1,000 years, coming down really to the present time, though I have found it convenient to divide them into ancient and modern.

Three or four specimens are offered. The first, as has been said, is a fells of the successors of Mohammed, — date about 700 A. D. The second is a piece struck by one of the Turcoman race, who reigned in Syria from 1100–1300. The next is a gold dinar of Spain, struck under the Moorish dominion there, which lasted from 750–1027. I also pass a Hindu coin of about 700 A. D.

These Oriental coins belonged to many dynasties, and are very numerous. I have no means whatever of estimating the number, but exercising my Yankee privilege of guessing where calculation is at fault, I believe that 10,000 pieces would not include many duplicates.

The mediæval coins have a well marked limit at their commencement, but shade off so gradually into modern that it is difficult to tell exactly where to divide them. The Barbarians, in their descent on Rome, put a stop to all coinage, as well as other arts, and it was not till they had become settled in their new homes, that they turned their attention to providing themselves with money. The eight centuries, from 600 to 1400, will include most of them. I have no specimens of them to offer, and must confine myself to a general account. Italy, after being without coined money of her own for 200 years, was supplied in 780 by Charlemagne. His coins bear a monogram of Carolus on one side, and a cross upon the other. The dukes and counts and popes speedily followed his example. Silver pennies were the coin that was generally made. Two hundred years later silver coin was a common thing and gold was beginning to be introduced. Florence issued a very fine series of gold coins and has given the name of florins to one kind of coin. Venice coined silver in 1190 and gold in 1280, commencing the series of sequins, a once famous gold coin.

Spain coined the universal penny of silver in 900, and a few other series belong here, not of great value, however. The Moorish pieces have before been referred to under the head of Oriental. France, in 481, issued a very remarkable series of coins, the oldest of the mediæval types, and far superior to equally primitive attempts. These gold pieces were struck for 300 years, but Pepin and his successors were unable to carry on the work, and gold was cast aside, the coins for some time being of copper, and wretchedly executed; but in course of time it was again introduced and bid fair to rival its former

beauty, when civil war again disturbed the state, and the modern series commenced in 1350 under great disadvantages. Germany is a confusion of cities, counts, states, emperors, dukes, bishops, etc., that I shall not attempt here to unravel. Their mediæval coins, as well as those in Holland and Bohemia, commenced about 900 A. D., and the series close with the fifteenth century. I exhibit here one piece of peculiar character, called a Bracteate coin. The word is derived from a Greek term denoting a leaf, or thin plate. They were coined in the eleventh and twelfth centuries, by Otho of Germany and others, and in most of the states of Germany. Denmark and Sweden commenced the work about 1050, while Russia struck no money until so late that they may better be classed with modern coins. It is difficult to form any idea of the number of the pieces that form this class. From what I know of them I am persuaded that 10,000 would hardly give a complete collection of the various kinds.

We now come to our "*lastly*," Modern coins. I will not linger long over them. The British first claim our attention with a continuous series of coins, far longer than any country — unless we count China, — running back as it does to the seventh century, and maintaining certain characteristics through the whole of the long line. Scotland and Ireland may be spoken of in passing as having begun about together the use of coined money, but a history of its rise in England will show the course it took in those lands. The *skeattæ*, the first rudiments of coins that the native Britons issued, were very rude and uncouth. Hardly legible, they have puzzled coin collectors exceedingly. They belong to an uncertain period between 400 and 600, and were followed in 670 by a new style called the *styca*, one of which of Eanred, in the eighth century, is exhibited. These were coined mainly in Northumberland, while Kent and the other counties more happily hit on the penny, which has come down to the present day. The penny of Athelstane, which I have here, is of a little later date, about 800. At this time numberless bishops and other persons had the privilege of striking coins, and add not a little to the intricacies of the study by their different issues. They were, however, deprived of this privilege a century later. Egbert, who conquered the other kingdoms of the heptarchy about 800, commenced the regular British series, the former being more properly denominated Saxon coins.

It is not my design to trace up this series through its improvements. I pass around a penny of William the Conqueror with one of Victoria, to show the changes 800 years can produce, and close with the usual estimation of the regal series; one of each king would form a pretty cabinet of 100 coins, while if all the varieties were included, 5,000 would scarcely fill up the requisite number. Victoria issues 30 different denominations of gold, silver, and copper. The private tokens almost defy computation. Of Europe I have but little to say. The coins were mostly derived from mediæval series. I exhibit, however, one of Spain, of Ferdinand and Isabella, and one of the Grand Masters of Malta, about 1500. In the whole continent coinage has gradually been improving up to the present day. Russia is the only place that has commenced her coins within the modern era, of any note, and they were mostly copied from advanced types, so that few of them bear the archaic form noticeable in most first attempts. The modern coins of Turkey, Asia, and Egypt, are direct descendants of the Orientals before spoken of, and need no further notice from me. As to the number — when it is remembered that of the three metals there

are rarely less than ten denominations of coin, and that every petty prince and city, and often private men, had the power of coining; and that the modern series includes 400 years of the most abundant issues, — it may not be surprising that I estimate the sum of anything like a perfect collection from Europe and Asia at 300,000.

American coins need few remarks. I exhibit the earliest coin of this hemisphere in a N. E. shilling. It is the only piece that bears the archaic character that is so evident on all other beginnings. We commenced our coinage under more favorable circumstances. Much was done for the Colonies by England, and we had a highly perfected style of coin as models. We can furnish by no means so large a cabinet as other lands. I suppose 2,000 will be amply sufficient, tokens and all, to fill a cabinet of American coins.

Thus I have tried to exhibit the origin and rise of coinage in the world as well as I could in the short time I had. It may have given some new ideas to some members of the Society in regard to coins, and if so I am satisfied. Let us all take at least this comfort; that while there are some 500,000 varieties of coins in the world, the differences between any collections that private persons can collect is of not much account, and let us try rather to collect wisely than to have many things. — *MS. of the late Henry Champion, New Haven, Conn.*

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### NEWSPAPER CUTTINGS.

A VERY curious, if not valuable paper might be made up from the many little items concerning numismatics, which have appeared in the newspapers of late years. I propose to try something of the kind, to preserve in the *Journal* various facts, which have never yet been printed there.

OLD COINS. — Mr. John M. Brown, of Pluckamin, Somerset County, N. J., has in his possession a silver dollar of 1804. There were only five silver dollars coined in that year, and two of them were recently sold at Newark, one for \$450, and the other for \$864. Mary Brown also has a silver dollar of the date of 1802, and one of 1800; also a ten-dollar gold coin of 1801, with the American eagle and thirteen stars on the same. — *Trenton State Gazette.*

This brought out a long communication to the *Boston Transcript* signed C., giving a true account of the dollars of 1804, similar to that printed in the *Journal* for June, 1867.

Mr. St. Maur, of the Boston Theatre, is the possessor of some ancient coins and medals that are rarely seen by numismatists. One of these is an ancient Jewish piece, dateless, but corresponding with the medal described in the "Thomo Bartholini de Unicornio," and said to have been made at the time of the return of the Jews from their Babylonish captivity, five hundred years before Christ. On one side is a bas-relief of Moses, with the emblematic horn represented on his head, his name in Hebrew about his neck. On the opposite side the first commandment, in ancient Hebrew: "Thou shalt have no other god before Me." It is venerable in appearance, but well preserved. It is composed of silver and gold, and is about the size of a dollar. Another is a bas-relief of Julius Cæsar, in bronze, as sharp in its lines as though it were struck but yesterday. Lovers of antique coins should call upon Mr. St. Maur and see them.

The *Journal* for October, 1868, contained an article, in which the evident falsity of this medal of Moses was shown. The piece is, of course, of much later date, but quite curious. Can any reader give an account of Mr. St. Maur's collection?

A very remarkable coin has recently been brought to England, observes the *Athenæum*, from India. Its value and importance appear in a few words of description communicated by General A. Cunningham. "But what," he writes, "is a double gold mohur compared to the great gold Eucratides which has just been brought from Bokhara by Aga Zebalun Bokhâri? It is two inches and a half in diameter, and weighs *ten staters*, or *eleven guineas*! It has the usual helmeted head on one side, with the horsemen and inscription on the reverse. The owner has refused seven hundred pounds for it. It is genuine, and beats all the Greek coins hitherto discovered."

The coin mentioned in this article certainly caused one of the real numismatic sensations of this century. The coin was brought to Europe about 1837, and was finally bought for the collection attached to the *Bibliothèque Impériale*, now *Nationale*, at Paris, at the price of 12,000 francs.

The only gold medal ever voted by Congress to General Washington is offered for sale in Philadelphia. It was given in honor of the evacuation of Boston by the British. On one side is a fine medallion profile of Washington, and on the reverse he and his staff are grouped on Bunker's Hill, while the British fleet is seen moving down the bay. It contains \$180 worth of gold. It is said that it is in good preservation, and that five thousand dollars have been already offered for it.

This medal, certainly the most interesting and valuable in the American series, was for sale a few years since, being, if I recollect, the property of John A. Washington. Does any reader know of its present whereabouts?

One of the Utah legislators has an old copper coin, with hieroglyphics, Hebrew characters and Arabic numerals stamped thereon, said to have been stumbled upon by some hunter or traveler on the Colorado. The precious relic is submitted to the judgment of "Professor Phelps," one of the wise men of Mormondom, who says that on one side appears, when translated,—

"The King, Hagagadonihah, over the Kingdom near the sea west, sends to all greeting: one senine."

On the other side,—

"In the 95th year of the Kingdom of Christ, 9th year of my reign: Peace and life."

MOTTOES — "Weapon for weapon, Life for life."

"The coin is 1765 years old, and is evidently a Nephite senine, or farthing, as mentioned in the fifth chapter of second Nephi, in the book of Mormon, English edition, page 517. It is about the size of an English farthing. The numerals are plain, Arabic figures."

What is the explanation of this paragraph? Is it a hoax on the general public, or only on the Mormons? We know very well that no coin 1765 years old has Arabic figures on it, but as to this piece it is not safe to hazard a guess.

ANCIENT COIN. — A wealthy Jew residing near Selma, Arkansas, has in his possession a shekel which was struck in the mint of Judea, seventeen hundred and fifty years ago. It is about the size of a half dollar, but the silver is so impure, that its intrinsic value is but fifteen cents. The owner would hardly part with the relic for as many hundred dollars. It has been in his family five hundred and sixty years.

I quote this simply for the remarkable statement that the coin has been handed down in one family for five hundred and sixty years. The owner is fortunate in being able to trace his pedigree so far back, and fifteen hundred dollars would be a paltry sum in comparison with such a relic.

S. W. Atwood, of Littleton, has a fine collection of rare coins, comprising over four hundred pieces, the oldest being dated 1652. Among the collection are thirty silver dollars, representing as many different nations. Of American silver dollars he has one of each year from 1795 to 1800, inclusive, and he also has all the dates of pennies from 1794 to 1872, inclusive, except 1806, 1809, and 1815, — none being coined the latter year.

W. N. Thompson, of Abington, has a set of United States cents of every year since the organization of the government, except 1815, when none were coined. He has also quite an extensive collection of colonial, foreign, and ancient coins, including one of the date of 1267.

Mr. Arthur Burdick, of Middletown, has one of the finest and most perfect collection of cents of the United States coinage in the country. He has been fourteen years picking them up, and

has got them nearly all in trade. They extend from 1793 to 1871, inclusive, and there is not an imperfect date among them.

These gentlemen are, I fear, not known to the numismatic world as prominent collectors.

Alfred S. Robinson, of Hartford, a few days since, sold a half dollar of the year 1797, for \$36. Thos. W. Fox, of Norwich, has a "Higley penny," for which he has been offered \$50 in cash and \$25 in "barter." There are only three of these coins known to be in existence.

The *Salem Observer* reports that a gentleman in that city, who is in the "old coin" line, recently sold to a collector in Hartford a copper cent for seventy-five dollars. It was the coin known as the "Higley copper," the first copper cent of Connecticut, dated 1737, and struck by a blacksmith named Higley. But three specimens of this ancient coin are known to be in existence, and being thus rare it readily commands the high price paid for this one of the three.

These statements are as wild as any ever made about the dollar of 1804. Instead of only three specimens of this coin in existence there are certainly five quite different varieties of the Higley coppers. They are all rare, and for some of them the price of seventy-five dollars has been exceeded.

**SINGULAR DISCOVERY.** — On Saturday last a lad nine years of age, a son of George P. Reed, of Roxbury, went to May's Woods to pick berries. In climbing over a ledge of rocks, near Warren Street, on the road to Dorchester, he put his hand into a cavity under a flat rock for the purpose of drawing himself up, when accidentally looking into the cavity, he saw something bright. He picked it up and found that it was a curious piece of silver money. Upon seeking further and removing the dirt he succeeded, to his great delight, in finding twenty-five pieces more. The money proved to be of the Pine Tree coinage of Massachusetts, 1652, being of the denominations of shillings, sixpences, threepences, and twopences. Most of them are in good condition. They are now in the collection of W. E. Woodward, of Roxbury. — *Herald*.

This discovery took place in 1863, and the pieces were offered for sale at the time of the dispersion of the McCoy collection; but no notice of the discovery was ever printed in the *Journal*.

**A RARE COIN.** — A little son of Mr. George L. Hart, while at play in the garden in the rear of his father's house in Fayette Street, on Saturday afternoon last, dug up a coin which, upon examination, proved to be an English guinea of the time of Charles the Second. It is in a perfect state of preservation, every line sharp and distinct, and bears the date 1676. On one side is a vignette of Charles II., surrounded by the motto, "Carolvs. II. Dei. Gratia." On the obverse side are four sceptres and four crowns, with the coats of arms of England, Ireland, Scotland, and Wales, with the remainder of the motto, "Mag. Br. Fra. Et Hib. Rex," and the date. This is a very rare coin, as there are probably not a dozen extant in the world. Here is a good chance for connoisseurs in coins, or numismatic societies, to secure a valuable addition to their collections. It is impossible to say how the coin came to be in the place where it was found. A large sum has already been refused for the curiosity.

The finding of this coin caused some talk at the time, and I believe it is a fact that many dollars were offered for it. But really it is far from rare, and instead of "a dozen extant in the world," specimens can be bought at any time in London for twenty-five or thirty shillings.

The Annapolis (Md.) *Republican* gives the following description of an old coin recently found at that place: On the face, in the outer circle, is the word "Masathvsetts," and three half-destroyed letters, one resembling "M"; in the inner circle a leafless tree with partly visible roots. On the reverse the outer circle bears the words "New England, An. Dom"; in the centre are the figures "1652." This ancient silver coin is about the size of an old English shilling; the edge of the rim is worn in three places about the sixteenth part of an inch, and with this exception it is in a fine state of preservation, which fact gives weight to the supposition that it had been coined but a brief time previous to its loss or burial.

**AN OLD COIN.** — An old copper penny of the date of 1723, and known as the "Rosa Americana," was found lately on the David Buffinton farm in Somerset, R. I. In removing a portion of an old stone wall, the coin was found embedded in the earth under the foundation stone, and was perfect with the exception of being thickly pitted. On one side there is a representation of an

American rose surmounted with the English crown, and the words, "Rosa Americana Utile Dulci." On the reverse side a portrait of George the First, with the following inscription around the rim: Georgius D. G. Mag. Bri: Fra. et Hib. Rex.

While workmen were digging recently for the foundation of the old Portsmouth Savings Bank, several copper coins were found. One of them bears the date of 1757, and has the same symbol as the old "pine-tree shilling."

In this last case the date is undoubtedly a misprint for 1776, and if so, the coin was exhibited at the meeting of the Boston Numismatic Society in June, 1870, and thought to be a great curiosity.

**ANCIENT SILVER COIN FOUND.** — A few days since, some workmen, in digging on the bank of the Kenduskeag stream, about two miles from the city, turned out a deposit of silver coin, amounting to about forty dollars in value. These coins are of the size of a ninepence and a common cent. On one side is a head, and on the other an Indian with bow and arrows and one star. The letters on one side appear to make the word "Victoria," with three letters additional. The lettering on the other side we could not decipher. The money is quite thick and very imperfectly trimmed, having no finish on the edge. The head and the Indian are well done. How this money came in its deposit is, of course, a mystery, but it is undoubtedly old Spanish, Peruvian, or Mexican coin. — *Bangor Journal*.

W. H. Newhall, of Manchester, a few days since found an ancient copper coin while searching for Indian relics in a field near Amoskeag Falls, which had just been ploughed for the first time in twenty-five years. Upon one side of the coin appears the date 559 in Arabic numerals and a small crown. Upon the other side there is the number six in Roman numerals and four small parallel pillars. The coin is much corroded and worn, and no one is able to decide as to the government which issued it.

S. L. A., Holton, Ind., asks, "What is the value of a copper coin that bears the following subscription in Roman letters: 'Hibernia, 825,' and in the centre an engraving between that of an Italian harp and that of a shield. On the other side, 'Georgius IV., D. G. R. X.' with an engraving looking something like a Roman, yet the costume is something like that of an American Indian. The piece is not quite as large as the United States copper cent. I can give you the history of it as it is known here. It was ploughed out of the ground where it had never been ploughed before, and it was about ten inches under ground." — You cannot fix the value of relics, and it is useless to ask such questions.

This relic is one of the most remarkable from a comic point of view. That an Irish halfpenny of George IV. should become subject of real inquiry seems too absurd. It is always a little rash to say that ground had never been ploughed before, and it certainly seems that this particular piece of land must have been turned up not very long before. The following miscellaneous extracts hardly need any notes:

**RARE COIN.** — Mr. John Pierce, of this city, has in his possession two of the original "Washington cents," coined in 1783, having upon one side the head of Washington, with the words "Washington and Independence," and upon the other the words "Unity States of America — one cent." It is well known that as soon as the fact of the manufacture of this coin came to the knowledge of Washington, he caused it to be stopped, and forbid its issue. But a very limited number got into circulation, and it is now held in high estimation by collectors of coin. Those which Mr. Pierce has were found by him among coppers taken in trade about twenty-five years ago.

**FOR COIN FANCIERS.** — The Washington cent of 1783 is not very rare or valuable, as they make them in England now. The Washington cent of 1791 is quite rare, and is worth from \$3 to \$25, according to the state of preservation the specimen is in; but the copper Washington coin of 1792 is more valuable than all, and is of great rarity.

Mr. Festus Campbell of the Western Railroad, says the *Pittsfield Eagle*, who by the by is exceedingly zealous as a collector of old coins, recently sold a genuine "Washington Penny" for \$10.50.

**COUNTERFEIT COIN.** — A large number of counterfeit cents of 1793 and 1799, Massachusetts half cents of 1787 and 1788, Washington cents, etc., are in the market for sale. They can readily be detected, as they are made by the electrotype process, and when dropped on a hard surface do not have the clear ring of the genuine.

**BRASS VS. COPPER.** — *Mr. Editor*: I have observed some queries in regard to the cents of 1815, in your paper. An old antiquarian friend used to tell me in my youth, this story, which may account for the tradition of their containing gold: A wag, knowing that no cents were coined that year, offered a high price for any cents marked 1815, — and enjoyed the excitement produced among all classes of persons, who searched diligently for them, supposing that the advertiser had secret information of their containing a portion of gold. A.

I had thought this article ended here, till the following astounding item appeared in the *Daily Evening Traveller* for November 18, 1873:

At the desk of C. Robinson, Esq., in the rotunda of the Custom House, may be seen a silver medal, presented by George III. to an Indian chief, for services rendered in the French and Indian war, more than a century ago. Four others were struck off at the same time for other chiefs, but this is the only one known to be extant. It is three inches in diameter, and weighs three ounces. On one side is seen the British coat of arms in bas-relief, and upon the other the bust of the king. It was presented more than fifty years ago to a white lady in the Northwest Territory by a dying Indian chief. It is now owned by Mr. I. D. Stoddard, of Vermont. It is understood that he is negotiating for its sale to an English Historical Society for one thousand pounds.

Mr. Robinson informed me that Mr. Stoddard really attaches to this medal the value of one thousand pounds. I have a specimen of the same medal in perfect preservation, and do not consider it worth more than ten pounds. It is certainly somewhat rare, but not remarkably so. I do not think any one can possibly have the certain knowledge that only five were struck.

W. S. APPLETON.

### COIN IN CHINA.

A SHANGHAI letter to the *London Daily Telegraph* contains the following: "The subject of coinage is again becoming generally discussed, for really coppers and bad dollars are a dreadful, indeed a disgraceful, nuisance. All civilized countries from time immemorial have had a coinage for the purpose of barter. The only real coinage belonging to the great Chinese Empire is copper cash, about twelve hundred of which go to a dollar, and these, having a hole in the centre, are strung together like beads. History tells us of an ancient emperor, who had an iron coinage made in order to check avarice among his people, and certainly this ultra-barbaric method of exchange is very nearly as inconvenient. To carry any quantity of Chinese cash is a physical impossibility; wheelbarrows are constantly seen going through the settlement heavily laden with strings of copper cash. In consequence of this cumbersome method of exchange foreigners have had to introduce the Spanish dollar, which have subsequently been for the most part replaced by the Mexican dollar, and as these are not legal or current coin of the realm, as sovereigns are in England, a host of villains have manufactured dollars, some only slightly less in value to the Mexican; but other makers, with india-rubber-like consciences, have made some of iron with a coating of silver, some of brass, copper, and a judicious admixture of different metals; to say nothing of an extensive system of electro-plating that is carried on by certain rascals. A feeble attempt on the part of the Colonial Government of Hong Kong to introduce a better coinage was made, and an extensive mint erected in the colony; but strange to say, from mismanagement and incompetency on the part of somebody or other, the establishment did not work well, and was finally closed and sold to the Japanese, who, it must be added, soon erected a beautiful mint at Osaka, and placed a competent staff of native and foreign officials to work it, and now the Japanese are turning out their dollars by the thousand. The annoyance and inconvenience caused by having dollars in circulation of different value is indescribable, to say nothing of the loss it occasions many local traders, and not the least of the evils is, that it necessitates every payment being examined by a native skilled in the touch and value of dollars. This individual we call a *shroff* and the rascality and villainy carried on by them and by *compradores*, who have to disburse money to sailors and others who are not in a position to keep a skilled official to receive their dollars for them, is enormous. Poor Jack's hundred dollars are not really worth more than eighty. Heavy payments are made in lumps of silver; this, again, is in the hands of experts; woe to the foreigner who attempts to handle what is known as *sycee* or lump silver. It

has been wisely urged, in order to get rid of this very unsatisfactory state of affairs, that when the treaty is next revised, it should be made compulsory for the Chinese Government to issue a reliable coinage, which certainly would materially facilitate many commercial transactions, for the loss in exchange now forms a very considerable item in many establishments. I have used the expression 'made compulsory,' because no one who knew anything of the Celestial character would dream for a moment that the Chinese would better the coinage of their own accord. Copper cash has sufficed them for two thousand or three thousand years, and it might just as well continue to do so for another similar period. It is contrary to native instinct and tradition to alter or improve anything. Therefore, in our own interest, as well as in theirs, the matter of a new coinage should be insisted on."

### EARLY COPPER COIN FOR MASSACHUSETTS.

[From the Records of the Council of the Province, 1703.]

*17 March.* A Memorial of William Chalkhill, One of the Moneyers of Her Majesties Mint in the Tower of London now resident in Boston proposing That if the Government think fitt, He would undertake to bring over hither Ten Thousand Pounds in Copper Money, at such prises and Values as shall be agreed upon, was sent up from the House of Representatives, and read.

*19 March.* Proposals Offered by William Chalkhill, One of the Moneyers of her Maj<sup>ties</sup> Mint in the Tower of London to furnish the province from England with Small Money of Copper to the Value of Ten Thousand pounds sent up from the Representatives were read And Resolved, That John Walley, Penn Townsend, and Andrew Belcher Esq<sup>n</sup> be a Committee of the Board to joine with such as shall be named by the House of Representatives to consider of the said proposals, And to make their report thereupon. Which Resolve being sent to that House for their Concurrence, was returned Agreed to And M<sup>r</sup> Nehemiah Jewett, Capt Samuel Checkley, and Capt Samuel Phips named to be of the Committee for that Affair.

*26 March.* The Report of the Committee upon the proposals offered by M<sup>r</sup> William Chalkhill, was brought in by John Walley Esq<sup>r</sup> Chairman and read, and laid upon the Table, The said report being in favour of an Agreement for £5000 only and y<sup>t</sup> in pence.

*27 March.* The Report of the Committee upon the Proposals offered by M<sup>r</sup> William Chalkhill for Furnishing of the Province with small Money of Copper was sent down to the Representatives at their Desire, & return'd again from that House with their Resolve thereupon, Viz.,

That the Report of the Committee be Accepted, And John Walley, Andrew Belcher & Samuel Legg Esq<sup>n</sup> & Cpt. Samuel Checkley be appointed & impowered a Committee forthwith to draw Articles of Agreement with the said M<sup>r</sup> Chalkhill accordingly, And the Covenants & Engagements of the said Comm<sup>tee</sup> in this Affair shall be ratified and made good by this Court;

W<sup>ch</sup> Resolve being read at the Board, & the Question put for Concurrence, It was not Consented to, But refer'd to Consideration at the next Court, if then Offered.

## COMPOSITION OF ROMAN COINS.

THE composition of ancient Roman coins and medals has been examined by M. Commaïlle, who has published a memoir on the subject, giving the composition of thirty-seven different medals, in the *Journal de Pharmacie*. The basis of the metal employed by the Romans was pure copper, alloyed with different proportions of tin, lead, zinc, silver, etc. Formerly numismatists were agreed in believing that the ancients never employed pure copper in the manufacture of their coins, and Mongez asserts that no antique coin of pure copper has ever been found; but Pelouze now states that he has not only met with Roman medals with very small quantities of a foreign metal combined with copper, but that he has analyzed several coins of copper so pure that the reagents could not reveal the smallest trace of another metal. M. Commaïlle gives the description and analysis of the following among other Roman coins found in Algeria: Augustus — copper, with traces of tin and lead; another — pure copper; Claudius I. — pure copper; Vespasian and Marcus Aurelius — copper, with traces of tin; Titus — copper 96.6, zinc 2.71, iron 0.85, traces of antimony; the Roman *as*, — copper 69.65, lead 24.37, tin 5.98; a coin of Constantine — copper 83.55, lead 14.76, tin 1.42, iron 0.27, traces of cobalt. The comparison of the analyses of M. Commaïlle shows that the metal employed varied from pure copper to ten per cent. of tin, and nearly twenty-eight per cent. of lead. In twenty-eight coins the three metals were found combined. In some the lead and tin were certainly present by accident. M. Pelouze found cadmium in some medals, and M. Commaïlle found gold in the medals of two princes, who occupied the imperial throne about the same time. In one coin he found traces of cobalt, in another of antimony, and in a third of a metal which he believed to be bismuth. His memoir will, undoubtedly, be of much interest to scientific antiquaries.

## ASSYRIAN DISCOVERIES.

AMONG the numerous minor clay documents and objects in the collection there are, of course, several others of interest.

Two of these are lumps of clay, which have evidently been moulded on a string attached to a linen roll, and the under side of the lumps still bears the impression of the texture of the material. These pieces of clay are stamped with the impression of a circular seal, representing a king slaying a lion; and round the edge of the impression I have read the legend:

"Assur-bani-pal, King of Assyria, son of Esarhaddon, King of Assyria, grandson of Sennacherib, King of Assyria."

So that this is the veritable Royal Seal of Assur-banipal, the great Sardanapalus of the Greeks. Such clay impressions were probably attached to treaties, or other diplomatic documents, by a cord tied round the roll, and passing through the clay. — *Smith's Discoveries in Assyria*.

## MEDAL OF THE PRETENDER.

*Eds. Journal of Numismatics:*

IN a rare little book which I have, I find a description of a medal which may perhaps be of interest to some of your readers. The book is an account of the adventures of the young Pretender. It is entitled, "Ascanius, or the Young Adventurer; a True History. Translated from a Manuscript privately handed about at the Court of Versailles; Containing A particular account of

all that happened to a *certain person* during his wandering in the *north*, from his first arrival there *August* 1745, to his final escape on *September* 19th, in the following year." etc. . . . "Edinburgh Printed for the company of Stationers and *R. F.* in *Dublin* 1779." Pp. 180. Lowndes does not mention this edition, but mentions an earlier one which sold for £1.

The prince arrived in France on the 29th of September, 1746.

It was apparently within the year after his arrival that the following occurred, which I quote from pp. 127 and 128:

"During this time, he neither went so frequently nor stay'd so long at *Versailles*, as he had been accustomed to do; and rather avoided than sought any private conference with the king. The first publick indication he gave of his disgust, was to cause a great number of medals, both of silver and copper, to be cast with his head and this inscription,

CAROLUS WALLÆ PRINCEPS,

And on the reverse, *Britannia* and shipping, with this motto:

AMOR ET SPES

BRITANNIÆ.

Everybody was surprised at the device, as *France* was reduced to the condition of making peace, entirely by the bravery and successes of the *British* fleet: the device gave great offence to the *French* ministry and to several of the nobility and others."

This medal seems to have greatly aggravated the feeling against him, if it was not the cause of his arrest and final removal from France shortly after, in December, 1748.

WILLIAM JOHN POTTS.

*Camden, New Jersey, Nov. 25, 1873.*

## THE COINING PRESS FOR THE NEW TRADE DOLLAR.

WE were shown yesterday at the works of Messrs. Morgan & Orr, No. 1219 Callowhill Street, the new coining press, just built by them for the purpose of coining at the San Francisco Mint all denominations of silver and gold coinage, but especially the new silver trade dollar ordered by the Department of the Mint.

This new machine weighs eighteen thousand pounds, and is made entirely of the best steel, iron, and brass produced in Philadelphia. The steel plate above the coinage stamp is home-made, and equal, if not superior, to the finest English, a fact that speaks well for our Philadelphia steel industry. The beautiful heavy brass beam was cast seven times over to secure its accuracy and exactness, as well as finish and strength. The large fly-wheel is cast hollow, and loaded with base metal so as to give it additional weight to counterbalance the heavy brass beam. This fly-wheel was cast in sections and securely united. In the front of the machine is a finely made brass cylinder to hold the unstamped coin, which, as the wheel revolves, slip down one at a time upon the sliding bed-plate of iron with apertures made to receive a single coin, then drawn into the machine, the stamp descends, and the new trade dollar is

carried out complete by an interior inclined plane. The heavy brass beam referred to of course controls the stamp. Perfect simplicity characterizes the machine, which is two and a half times beyond the capacity of any other coining machine that the firm ever made for the government. It is capable of striking eighty twenty-dollar gold pieces, equal to \$1,600, per minute, or twenty silver trade dollars in a minute.—*Philadelphia North American*, October 16, 1873.

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### THE SEWARD MEDAL.

GEORGE F. ROBINSON yesterday received the medal awarded to him by Congress in 1871 for saving the life of Secretary Seward, when attacked by the assassin Payne, on the night of the 14th of April, 1865. The medal was made at the United States Mint in Philadelphia, at a cost of fourteen hundred dollars. On the obverse side of the medal, Mr. Seward is represented lying in his bed, with the curtains drawn. Standing at the side of the bed is Payne, with an uplifted dagger in one hand, and with the other clutching the throat of Robinson. On the reverse side of the medal is a bust of Robinson; above his head a wreath of flowers, and on each side the following inscription: "For his heroic conduct on the 14th day of April, 1865, in saving the life of the Hon. W. H. Seward, then Secretary of State of the United States."—*Washington Chronicle*, November 17, 1873.

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### COINS IN FOUNDATIONS.

THE following passage shows this practice to have prevailed as early as 1658, though it may probably be traced to an earlier date:

"But the ancient custome of placing coyns in considerable urns, and the present practice of burying medals in the noble foundations of Europe, are laudable ways of historical discoveries in actions, persons, chronologies; and posterity will applaud them."—Browne's *Hydriotaphia*, ch. iv.

*From London Notes and Queries*, No. 159, Nov. 13, 1852, p. 470.

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### CONNECTICUT COUNTERFEITING AND COINING COPPERS.

ABEL BUELL, an uncommonly ingenious mechanic, was a native of this town [Killingworth, Conn.]; he was apprenticed to Ebenezer Chittenden, a gold and silver smith in this place, previous to the Revolution. Buell was married at the age of nineteen years, and at the age of twenty, altered a five-shilling colony note to five pounds. His neighbors had suspected that something was going on in his house which was wrong, as a light had been seen in his chamber at unusual hours of the night. He was discovered by some person, who, mounting a ladder, looked in at the window, and saw him in the act of altering the bills. So ingeniously was it done, that it could only

be discovered by comparing the stumps of the letters with those left in the book from which all the colony bills were issued. Matthew Griswold, the King's attorney, afterwards governor, conducted the prosecution against Buell. As it was his first offence, and he otherwise sustained a good character, Mr. Griswold granted him every indulgence which he could consistently with his duty as a public officer. Buell's punishment appears to have consisted of imprisonment, *cropping*, and *branding*. The tip only of Buell's ear was cropped off: it was held on his tongue to keep it warm till it was put on the ear again, where it grew on. He was branded on the forehead as high up as possible. This was usually done by a hot iron, in the form of a letter designating the crime, which was held on the forehead of the criminal till he could say the words

"God save the King."

Upon the conclusion of the Revolutionary war, Mr. Buell and some others were employed by the State in coining coppers. Mr. Buell constructed all the apparatus for this purpose; and to such perfection did he bring it, that he was able to coin 120 in a minute. Soon after, he went to England, for the ostensible purpose of procuring copper for coining, but in reality to gain some knowledge of the machinery used for the manufacturing of cloths of various kinds. — Barber's *Connecticut Historical Collections*, pp. 531, 532.

### EASTERN COINS.

#### *Eds. Journal of Numismatics:*

THE London *Athenæum* has a letter from Mr. Eugene Schuyler, dated "Bokhara," in which, after iterating his belief of the existence of Timour's Library, he says he has "picked up some very rare works on Bokharan history, as also good specimens of the coins of Demetrius, Euthydemus, and Antiochus, also of subsequent Bactrian dynasties of Sultan, Sandjar, Tamerlane, and recent Emirs. The market has been spoiled by the Russians, and prices are very high."

Apropos of the above, three very interesting papers on Bactrian Coins, by Edward Thomas, of the London Numismatic Society (and formerly of the Bengal Civil Service), describing many of the above mentioned coins, will be found in a volume entitled "Collection of Miscellaneous Essays on Oriental Subjects, by Edward Thomas, Esq.," printed by Trübner. The Essays were papers read at different times before the Numismatic Society, and published in brief in the *Numismatic Chronicle*, etc. The volume is illustrated with plates from the *Chronicle*, and contains articles on "Indo-Parthian Coins," "Early Mohammedan Coinage," "Ancient Indian Weights," "Coins of the Gupta Dynasty," etc., etc.

I. F. W.

To make money — Get an appointment in the mint.

## THE UNITED STATES MINT CABINET.

"VERY many of the coins were obtained at bullion value, by the (then) Assistant Assayer, watching deposits, and rescuing pieces of great value and scarcity from being melted up. An equal number, perhaps more, were procured at market prices; sometimes singly, and sometimes by the lump. Coins of the United States (except in a few instances) cost us merely their intrinsic value; and medals struck here cost nothing.

"We can, however, give the cost of the whole, coins, medals, ores, etc., which, I am happy to say, would probably bring almost double, in the present market.

"The whole number of coins and medals at this time is 6,484; and the whole cost of these, and of the minerals, gems, ores, nuggets, etc., is \$12,443."

*Eds. American Journal of Numismatics:*

I can, with entire propriety, give you the foregoing extract from a letter of the Superintendent of this Mint, in reply to a call from the Director at Washington. It appears to be of sufficient interest to appear in your Magazine.

The collection was begun in 1838, shortly after the accession of Dr. Patterson to the Directorship. The business was confided to me, as having an antiquarian taste, although I had plenty of ordinary official work to attend to. It has been a great pleasure, and a means of gaining and fastening information of various kinds.

I would like to know whether any large or general collection, in this country, had an earlier beginning.

W. E. D.,

*United States Mint, Philadelphia.*

*October 25, 1873.*

## PREVENTION OF A FRAUD UPON OUR GOLD COINS.

THE Hon. H. R. Linderman, Director of the Mint, has just presented an admirable report on the condition and work of the institution under his charge. It will attract attention from numismatists throughout our country, and is a valuable contribution to our knowledge on the subject of the coinage. Dr. Linderman requested the assayer, Mr. Wm. E. DuBois, to supply him with information as to certain experiments made at the Mint, several years ago, having for their object the better protection of the gold coin, by making them thinner and concave. In response to that request, Mr. DuBois submitted the following interesting paper:

UNITED STATES MINT AT PHILADELPHIA,  
*Assayer's Office, October 15, 1873.*

I take pleasure in responding to the inquiry contained in a letter from the Director, on the steps that were taken here, some years ago, toward a prevention of the fraud of "filling" our gold coins.

These examinations and experiments were made September to November, 1860, thirteen years ago. I may state that it mainly fell to my lot to conduct them, but I had the indispensable counsel and coöperation of Mr. Eckfeldt, the late assayer, and Mr. Longacre, the late engraver.

They were brought about by the startling discovery, at the treasury of the United States in New York, of our gold eagles (ten-dollar pieces) having their interior taken out and replaced with a disk of platinum, a heavy and high-priced metal, of about one third the value of standard gold.

This was neatly covered in by a soldered rim of gold, the whole presenting a genuine surface, and without fault as to weight, diameter, thickness, or sonority. Along with these pieces we had the benefit of experiments by Dr. Torrey, the late assayer of the United States assay office at New York, so far as determining the composition of the pieces, and afterward we conferred with him personally as to the best means of prevention and detection.

Before stating our results and conclusions at that time, allow me here to insert that, just now, I am engaged in the examination of other filled pieces of larger and smaller denominations lately sent to me by the able and vigilant chief of the coin department in the United States treasury at New York, George Ashley, Esq., along with other pieces of fraudulent make, but of a different sort. This was the first time that I was aware that the platinum filling had been practised upon any other size than the eagle, although we had found silver fillings in the half-eagle and quarter-eagle many years ago.

The platinum-filled pieces now on hand are the double-eagle, the eagle, and the half-eagle. The first-named was detected at the Bank of England and thence sent over. Another double-eagle comes from the New York treasury and was detected there. Mr. Ashley remarks, "this is the worst fraud we have to contend with."

It seems this trouble is not confined to our coins. Some of the British sovereigns, it is stated, have been filled in the same way. That the large, thick double-eagles should be thus tampered with is not surprising, but we are compelled to wonder at their operating on half-eagles and sovereigns.

Now, without spreading abroad the way in which this thing is done (for that would serve no good purpose), let us look at the make-up of one of these filled coins. What with the two genuine outsides, the false inside, the new ribbed rim, and the solder, there are present no less than four separate pieces and five distinct metals, all put together with such nicety that none but an expert can tell the bad coin from the true.

Not to alarm the government, or the public, we have good evidence, so far, that the fraud is not much practised, and does not ordinarily go long undetected.

First, it is a slow way of making money, even for a consummate workman, and no second-rate man can do it; and, secondly, most of our coins soon find their way to the government treasuries, and there they have experts who can throw these pieces out at a glance or a touch, without being fully aware of the reason why. This remarkable faculty, possessed by Mr. Tandy of the New York treasury, more than by any other man we know of, reminds me of what was said of a money-changer in ancient Rome, that "he could see brass through silver." And it is some comfort to know that this over-laying art is not a new thing. Even the barbarous Germans, among whom

the Roman denarii were current, were so suspicious of it that they made notches all around the coin to see what was inside ; and some of these pieces, looking much like a circular saw on a small scale, have been handed down to our day and may be seen in rare collections. The Roman or Greek counterfeiter, however, was not to be named, in point of skill, with the rascals of modern times.

I should also mention that, with all the vigilance of Mr. Ashley and Mr. Tandy in New York, of similar officers in Philadelphia and elsewhere, so few of these altered pieces have yet appeared as to justify us in concluding, as above remarked, that the fraud is not extensively practised. Still it is very mischievous and injurious, and every means should be used to protect the treasury and the community from these losses of several dollars on a single piece of money.

Before proceeding to offer some suggestions in regard to the best mode of prevention, I would say a few words as to the best mode of detection. When, as already remarked, it is found that these filled pieces are right, or very nearly so, in weight, size, and sound, and have a genuine exterior, it must be apparent that our resources are very much cut down. There is usually, however, a slight discoloration, probably arising from heat during the soldering process. This cannot be much relied on, for a good piece may be discolored in the same way.

The test of specific gravity is one which they have not been able, and perhaps have not tried, to set at naught. Filling with plates of silver was abandoned by these artists because that metal is not much more than half as heavy as gold, and so the reformed coin was either too light or else too thick. Platinum is a little heavier than gold, and although a scarce and dear metal, and hard to work, it was found to answer the purpose. However, this addition invariably makes the specific gravity of the coin too great, and that by a difference so considerable that the fact of filling can be assured without laying the piece open or impairing it in any way.

To come to figures: a genuine gold coin of the United States (of any size, of course), will show the specific gravity about 17.20; or, if somewhat paled with silver alloy, as they were many years ago, perhaps as high as 17.30; that is to say, by way of explanation to those who have forgotten how specific gravity is found, between the weight of the coin in air and its weight in water there is a difference, which, as a divisor for the first weight, gives a dividend as above.

But we find that the double-eagle when filled shows a specific gravity 18.76, while the eagle and the half-eagle show specific gravity about 17.75 to 17.95. These differences are to be expected. We have no suggestions to make for the use of the criminals who are thus employed; they know very well that to attempt to adjust the specific gravity along with all the other points would increase their work and render it unprofitable.

Still, this sure method calls for very good apparatus, some skill and practice, and a little time, say five minutes, more time than a teller can spare. So that, in a public office, it is extremely desirable to have such a man as Mr. Tandy, or our Mr. Cobb. (No doubt a larger acquaintance would enable us to give other names, if needful.)

While I am on this point, allow me to repeat what was said in a former

communication, that we find the difference of specific gravity quite as wide in the case of the new class of counterfeits, the five-dollar piece of 1872, regularly made and struck, but debased about six per cent. These pieces show specific gravity about 16.46; say, in round terms, 16.50. Thus, while the filled piece is too high, this is as much too low. It would be a very difficult matter indeed to elude this test.

Now, in regard to the *prevention* of the *fraud of filling*, only *two* modes seem to be worth considering.

First, the door to this business is at the rim or periphery of the coin; the place where the reeding stands as a sort of *chevaux-de-frise* to keep out intruders. It would be a good thing to strengthen the defences at this circumvallation; in plainer terms, to fashion the rim so that it cannot be tampered with or imitated without easy detection. Formerly we milled a legend, in sunken letters, on this part of our silver half-dollars.

In France and Belgium, and recently in Spain, the gold coins are protected in the same way, but with raised letters; while in the German Empire, and some other countries, the thing is done as we used to do it.

Undoubtedly, it would be far more difficult to imitate or renew this lettering, whether raised or sunken, than the rib or reeding. They do that by making a new band, and going over it by the mechanical operation of a "nurling machine." Men of great skill *may* make the lettered edge, so as to be a fac-simile, according to the truism, "What one man can do, another man may do;" but I am strongly of the opinion that it would take too much time and labor to pay well. At any rate it seems worth while to make the experiment.

The *other mode* to be considered, is to return to *thin* gold coins, and cease (or nearly cease) from issuing any of a larger denomination than ten dollars.

This may displease those who deal in large sums, and like to count by twenties. But if gold is ever to be a real currency it must be made to suit the man of one piece, no less than the man of a million. And with a cheap counting machine, such as we have in the Mint, the great objection will vanish.

I speak of it as a *return*. Formerly our gold coins were thin pieces; so were those of England, and the European continent generally. The ducat, or sequin, a small, thin piece, was for ages the current coin of civilized and barbarous nations. The fourfold ducat of Austria is so thin as to be out of proportion to its broad diameter; yet it is a coin of great beauty, and well struck up.

There is, it is true, a slightly and scientific proportion in the diameter and thicknesses of our gold coin since the remodelling in 1834, and especially in 1837. But this proportion has been twice set aside without offending good taste. The gold dollar had to be made thinner, to escape popular complaint; and the three-dollar piece had to be spread out to make it distinctive.

A very thin coin would be easily bent and abused; but that is an extreme not contemplated. The coin should only be thin enough to make it troublesome and unprofitable to be sawed through (on edge), to insert a plate. In fine, instead of attempting to get up an artistic impossibility, the writer would take advantage of an economic inexpediency, and there find the remedy.

A few words and figures as to dimensions. How thin should our gold coin be, and what should be the largest?

They should be made thinner at or about the centre, than they are at the edge. To a slight degree this is done already, but not enough; and this concavity should be double: that is, on both sides of the coin. Of course, it will be understood that this is to be produced by convexity of the dies.

It has long been the usage here to measure or regulate coins by twentieths of an inch for diameter, and by thousandths of an inch for thickness. Then it is proposed, —

1. The ten-dollar piece, or eagle, to be of the diameter of 29 twentieths (1.45), which is one-twentieth less than the silver dollar, and two-twentieths more than the double-eagle; to be 35 thousandths thick at the edge, curving down to 25 toward the centre. At 25 we have the thickness of the old gold dollar.

No *wider* gold coin than this would be admissible, or desirable; but to comply with the law, and for special purposes, we might strike pieces of \$20, as they are now; the holders to run the risk of the evil we are fighting against.

2. Five-dollar piece, or half-eagle, diameter 21 twentieths (1.05), which is the same as the present eagle. Double concave, 30 thousandths at edge, 25 at centre.

3. Three-dollar piece, diameter 18 twentieths, at present 16; thickness, 25 thousandths, at present 34. This coin, and the lesser ones, need not be of the dishing-shape.

4. Quarter-eagle, diameter, 16; thickness, 25.

5. Gold dollar as at present.

It is further suggested, that this extension of diameter should not be in lieu of lettering on the edge, but that the latter should also be used, or tried, as far as thickness will admit.

It may be objected, that increase of surface exposes to increased abrasion. Numerous experiments here, not necessary to detail, prove that this is not the fact. It is also opposed to the philosophy of the case. As was stated by Mr. Longacre, formerly our engraver, a thin steel plate for bank-note engraving outlasts a thick one, from the fact that it has received a greater compression and condensation in preparing it. More than that, a compact, thick coin falls more heavily, and rubs more intensely, than an expanded, thin coin of the same weight. It is the far more frequent *use* of small coins which makes them wear more than large ones.

At the time we were experimenting, a five-dollar pattern was made, in copper, according to the shape proposed.

I am, very respectfully, your obedient servant,

WM. E. DuBois,

*Assayer.*

P. S. — Since the foregoing was in print, I have been asked by Mr. Ashley, "Would the *concavity* of a coin injure its *sonority*? The latter quality is an almost indispensable consideration. I should prefer to resort to almost any other expedient, rather than impair this quality. It is the first test usually applied, when a piece is in doubt."

In view of this just remark, it gives me much satisfaction to add, that we made some planchets of standard gold, of different sizes, and of the *dish*

shape; and found their sonority more marked, than in pieces of the flat form. Indeed, the ring was beautiful, somewhat resembling that of a bell; and for the reason that this shape is slightly similar, although hardly observable.

## TRANSACTIONS OF SOCIETIES.

### BOSTON NUMISMATIC SOCIETY.

*July 3.* A monthly meeting was held this day. In the absence of the President, Mr. Sprague was called to the chair. The Secretary read the report of the last meeting, which was accepted. Mr. Crosby exhibited a Spanish bronze medal on the restoration of Ferdinand VII. The Secretary exhibited a large lead medal of Washington, struck on the occasion of the "Metropolitan Carnival" at Washington, February 20 and 21, 1871. The Society adjourned at 4 3-4 P. M. WM. S. APPLETON, *Secretary*.

*October 2.* A monthly meeting was held this day. The Secretary read the report of the last meeting, which was accepted. The President read a letter from Judge Putnam, communicating to the Society a silver medal of Edwin Forrest, a donation from Mr. David R. Whitney. Mr. Crosby exhibited a very good specimen belonging to Hon. N. B. Shurtleff, of the rare medal of William Pitt, with the inscription BRITANNIA ET AMERICA JUNCTÆ. The Society adjourned shortly before 5 P. M.

WM. S. APPLETON, *Secretary*.

*November 6.* A monthly meeting was held this day. The Secretary read the report of the last meeting, which was accepted. Messrs. Thomas Wilson of Manchester, N. H., and Lorin G. Parmelee of Boston, were elected Resident Members. The Secretary was ordered to ascertain if Mr. Phineas Adams of Manchester, N. H., accepts the membership to which he was elected some time ago. In consequence of the ill health of the Treasurer, Mr. Pratt was requested to take charge of that officer's accounts. Mr. Crosby exhibited an impression of an old steel die of the State Treasurer of Rhode Island for a stamp of \$2.00. The Society adjourned shortly before 5 P. M.

WM. S. APPLETON, *Secretary*.

*December 4.* A monthly meeting was held this day. The Secretary read the report of the last meeting, which was accepted. The President announced a donation from Mr. Thomas Cleneay of Cincinnati, of four tin medals of the Cincinnati Exposition of 1873, for which the thanks of the Society were ordered. Messrs. Pratt and Green were appointed a committee to nominate, at the annual meeting in January, officers for 1874. On motion of the Secretary, it was voted that the Society subscribe for a copy of the work on American coins, which Mr. Crosby is publishing on behalf of the New England Numismatic and Archæological Society. Mr. Parmelee exhibited three curious little pieces: a German jetton, a copper coin of Cartagena, and a silver coin, probably of Christian IV. of Denmark. Mr. Crosby

exhibited two Italian bronze medals, one of Cardinal Francis de Medici, the other of a Barnabite friar. The Secretary alluded to a paragraph in the Boston papers a few days back concerning a medal of George III., for which the owner expected to get £1,000, and exhibited a better specimen of the same medal, the value of which is at most £10. The Society adjourned at 4 3-4 P. M.

WM. S. APPLETON, *Secretary*.

#### EDITORIAL.

*A Descriptive Catalogue of the Seavey Collection of American Coins, the property of* LORIN G. PARMELEE, *of Boston.* University Press, Cambridge: WELCH, BIGELOW, & Co., 1873.

WE obtained a copy of this volume at the owner's price of three dollars, and have seldom felt as if we had received less for our money. The work is well printed, except for the exceeding irregularity in the use of small capitals in the legends of the coins, probably not a fault of the printer. We wish we could add something more of praise, but so far as concerns the contents, criticism can hardly be anything but adverse.

We must first take exception to the words in the introduction, "This incomparable cabinet of national coins," which may be true, but which certainly will not be thought so by some other owners of valuable collections. The catalogue contains several pieces which have no place in it, as a catalogue of *American coins*. Among them are Nos. 54 and 55, the small medal of William Pitt, 67, the small Dutch medal of Rhode Island, which is made to point a joke, wholly out of place in such a catalogue, and others having no connection whatever with America. The Virginia cent, No. 61, would be a piece of rare interest, if it were not, as we feel sure, the usual halfpenny struck on a larger planchet. No. 404 is a piece, to the rarity of which especial attention should have been called; a *cent* of 1815, the Otho in first bronze of the American series. Verily, if genuine, here is a hitherto unknown gem. What shall we say of No. 836, the description of which we must quote at full length? "DOLLAR. A pattern from design made by Benj. Franklin, and familiar from impressions in tin, struck from the dies for distribution among the patriotic friends of the first Congress; the only one known in *silver*." Truly this is *descriptive* with a vengeance. The piece is undoubtedly that known as the "Continental Currency," and in silver is a treasure; but if a pattern, Nos. 63-66, should be placed with it, or if they are really coins (which can hardly be assumed from their metal), surely the fact of this one being in silver is not enough to place it in the rank of patterns. We have indeed great fault to find with the use of the word *pattern* in this catalogue. In what sense can Nos. 849, 850, 851, 853, 875, 876, 894, 909, 932, 933, 934, and some others be called patterns? They are at best trial-pieces of dies, certainly not of designs, and many of them were probably struck simply as curiosities. We are astonished at the absence of historical notes as to the origin and ownership of the rarer coins, which would have given great value to the catalogue, even after the publication of the large work which is now in press, under the auspices of the New England Numismatic and Archæological Society, and which leaves nothing to be desired in the matter of fulness. We cannot yet review that work, but promise to do so at its completion, with many regrets for the delays attending the appearance of the successive parts.

*Light in Masonry. A monthly journal of sixteen pages. Published at one dollar per annum: strictly in advance.* Rob. Morris, Editor and Proprietor. Office 626 Broadway, New York: July, 1873. Nos. 1, 2, 3.

We have received the first three numbers of the above journal. Each issue is to contain an illustrated article on Ancient Coins, in addition to the subject for which the publication is spe-

cially devoted. The editor has been a generous contributor to our journal, and we wish him much success in this undertaking. In a recent number he makes the following comments on ancient bronze coins :

"The enormous number of bronze coins washed out of ruined cities in the old world, will not surprise any one if he will estimate how much of the cheap copper money is used at the present day in Europe, and still more in such densely populated countries as China. Some facts in the history of modern copper coinage go to illustrate this matter. For instance, when the copper coinage of England was made by contract, at Birmingham, a few years since, the coining mill worked eight machines, which were capable of making 8,000 pieces an hour, equal to 192,000 per day!"

THE second number of the *Journal of the Liverpool Numismatic Society* has been received. It is issued in Liverpool and London, July, 1873; edited by J. Harris Gibson, well printed on good paper, and the articles are carefully prepared. It treats of the following topics, namely: Silver Tickets of the Theatre Royal; Actors' Checks; Theatre Royal Copper Checks, or Medallets; Local Numismatic Waifs and Strays; Sefton Park Medal; Medal awarded to Deputy-Superintendent Moore; Isle of Man Token; Shah of Persia, — Medallets. ILLUSTRATIONS: Proprietors' Ticket, Theatre Royal; Arms of the Blackburnes and Mores; Map of North Meols Coast; Vertical Section of the Sea Beach of Cheshire, showing its Archæological Contents.

The leading articles in this number will be found exceedingly interesting to the historical as well as the numismatic student.

MR. ISAAC F. WOOD, of New York City, has just issued the following Medal, the fourth of the series. *Obverse*: Within two circles, a fac-simile of the Seal of the Boston Numismatic Society, [on which is represented the rare New England Three-pence, a Pine Tree, the early Symbol of Massachusetts, and the three hills representing those on which Boston was built: Fort Hill, Beacon Hill, and Copp's Hill, and, Instituted 1860.] On the outer circle "Presidency of Ulysses S. Grant, 1873;" on the inner, "Boston Numismatic Society. Incorporated 1870." *Reverse*: Fac-simile of the Seal of the New England Historic, Genealogical Society, — a Shield on which is a Pine Tree, representing New England, surrounded by a belt bearing the motto, "In Memoriam Majorum;" at the sides "Inc. 1845;" above, a hand issuing from clouds holding a volume of Records; the whole encircled by the name of the Society. On the outer edge, "Twin Delvers in the Garden of History;" below, (Isaac F. Wood's Memorial Series). Brass and Copper. Size 20.

For sale by Edward Cogan, 408 State Street, Brooklyn, N. Y., and J. W. Haseltine, 1343 Chestnut Street, Philadelphia, at sixty cents each, or one dollar in both metals.

MR. JOHN ROBINSON, of Salem, informs us that a Pine Tree Shilling in fine condition was found in the spring of 1871, in the garden of Mrs. Slueman of Salem, who lives at No. 17 Cambridge Street, in that city. Another specimen, which was of a larger size, was found the year previous on the estate of the Plummer Farm School by one of the boys.

#### CURRENCY.

THE boy who had been taught that time is money appeared at the bank, the other day, and remarked that he had had an hour given him, and he would like to spend a quarter of an hour and would take the change for the other three-quarters.

JUST because a young man in Evansville coughed up a gold dollar, recently, that he swallowed some time ago, the citizens of that place speak boastfully of their "coughers of gold."

A DUBUQUE banker dropped a two-cent piece in the contribution box, and took out a cent for "discount."